(a) Sharp truncation by 0.01% criterion.

(b) Sharp truncation by 1% criterion.

(c) Smooth truncation by 1% criterion.

(d) Transverse magnetization produced by (a).

(e) Transverse magnetization produced by (b).
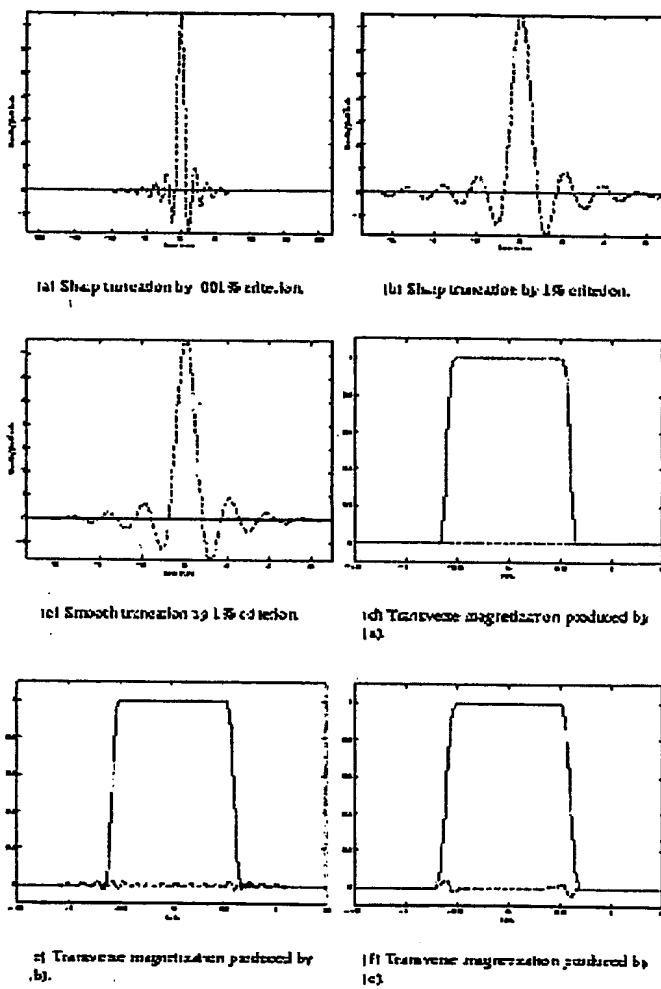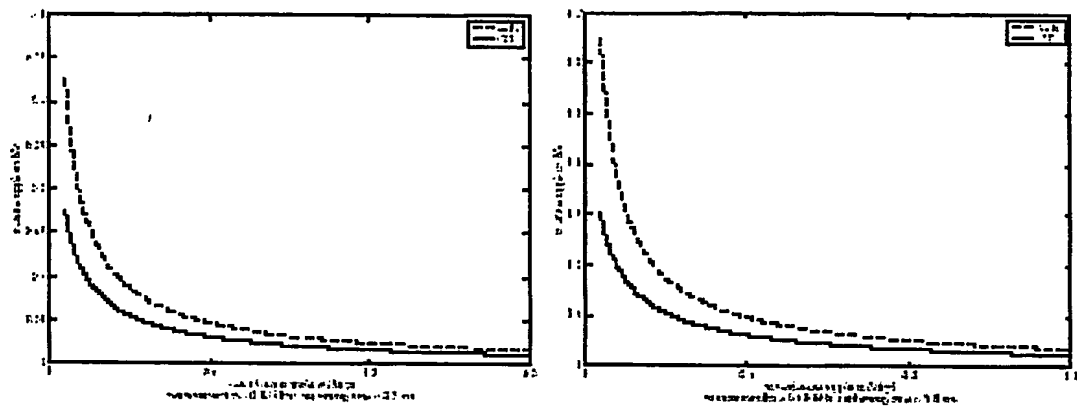
(f) Transverse magnetization produced by (c).

FIGURE 1

(a) Transition width = 0.3 KHz, rephasing time = 2.0 ms

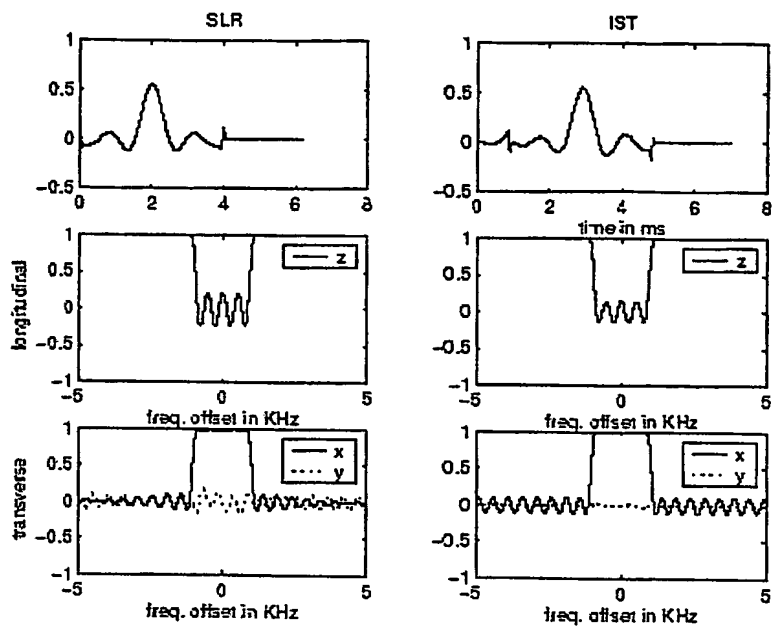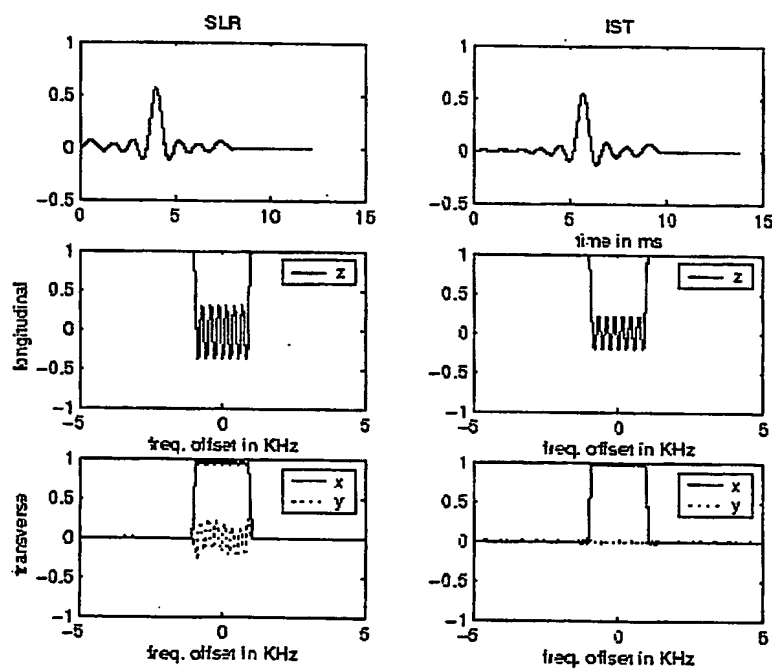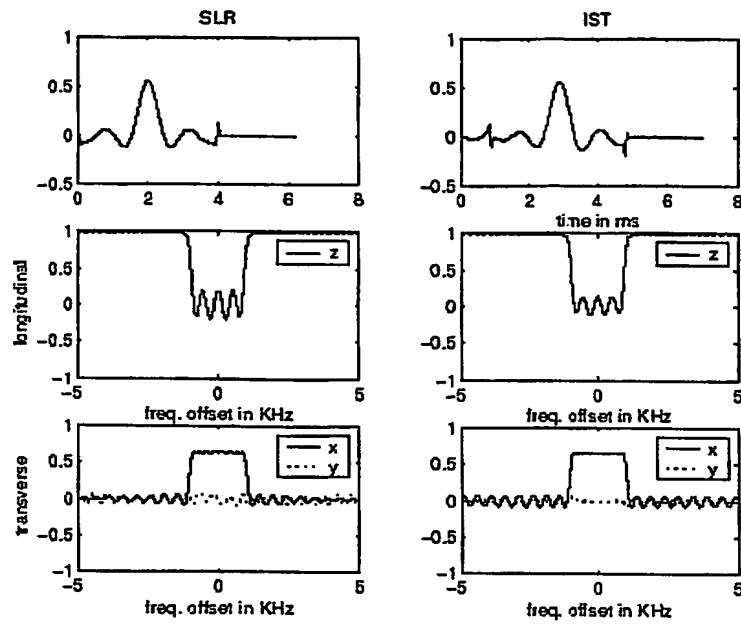(b) Transition width = 0.1 KHz, rephasing time = 5.0 ms
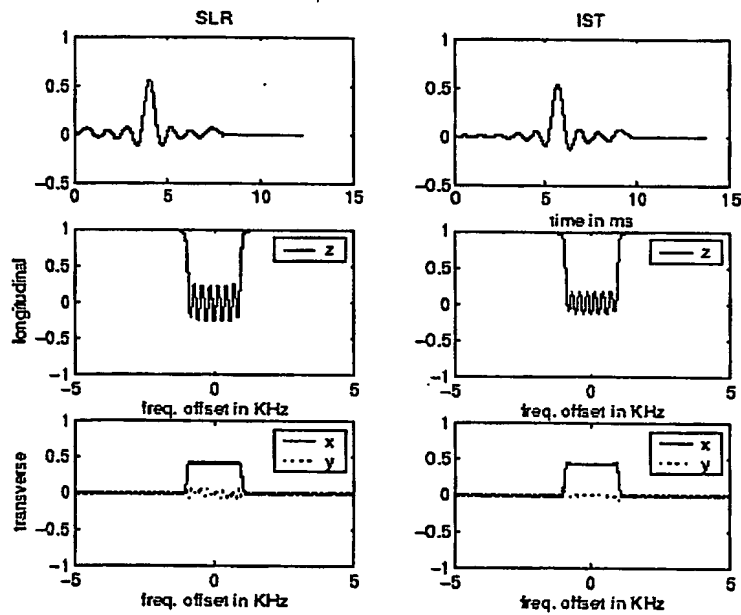
FIGURE 2

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FIGURE 3(a)

FIGURE 3(b)

(a) $T_2 = 10$ ms for a 90° pulse with 2 ms rephasing time, $\delta_2 = 0.1$, and 0.2 KHz transition width

(b) $T_2 = 10$ ms for a 90° pulse with 4 ms rephasing time, $\delta_2 = 0.01$, and 0.15 KHz transition width.

FIGURE 4

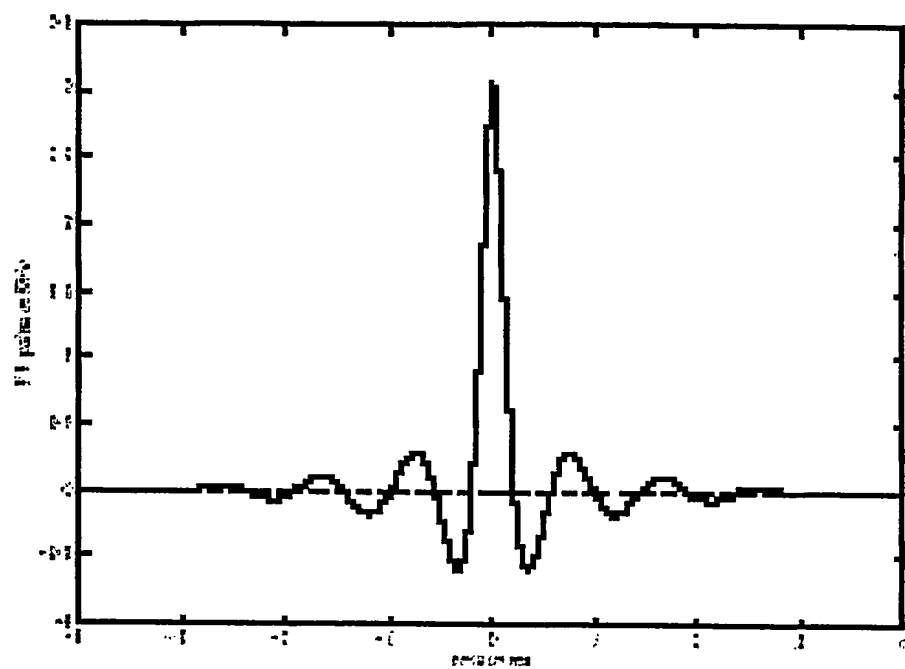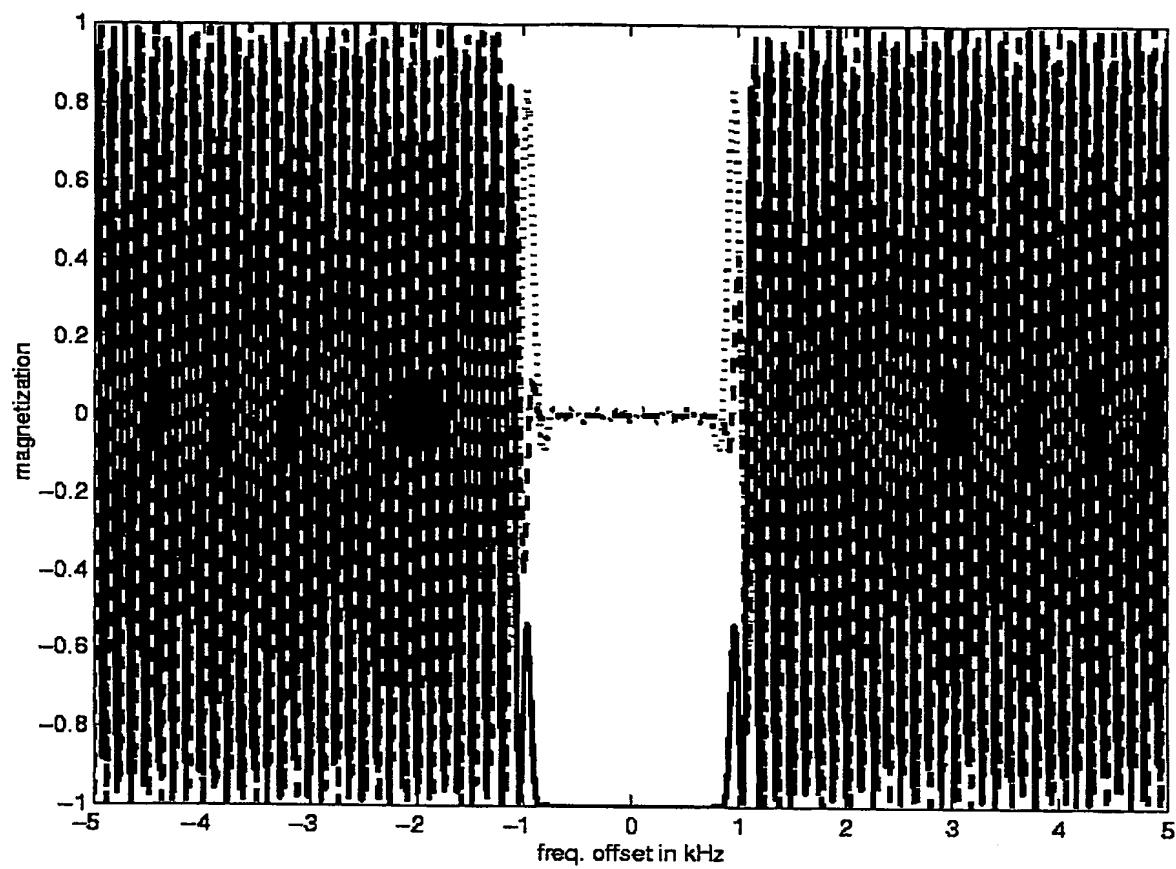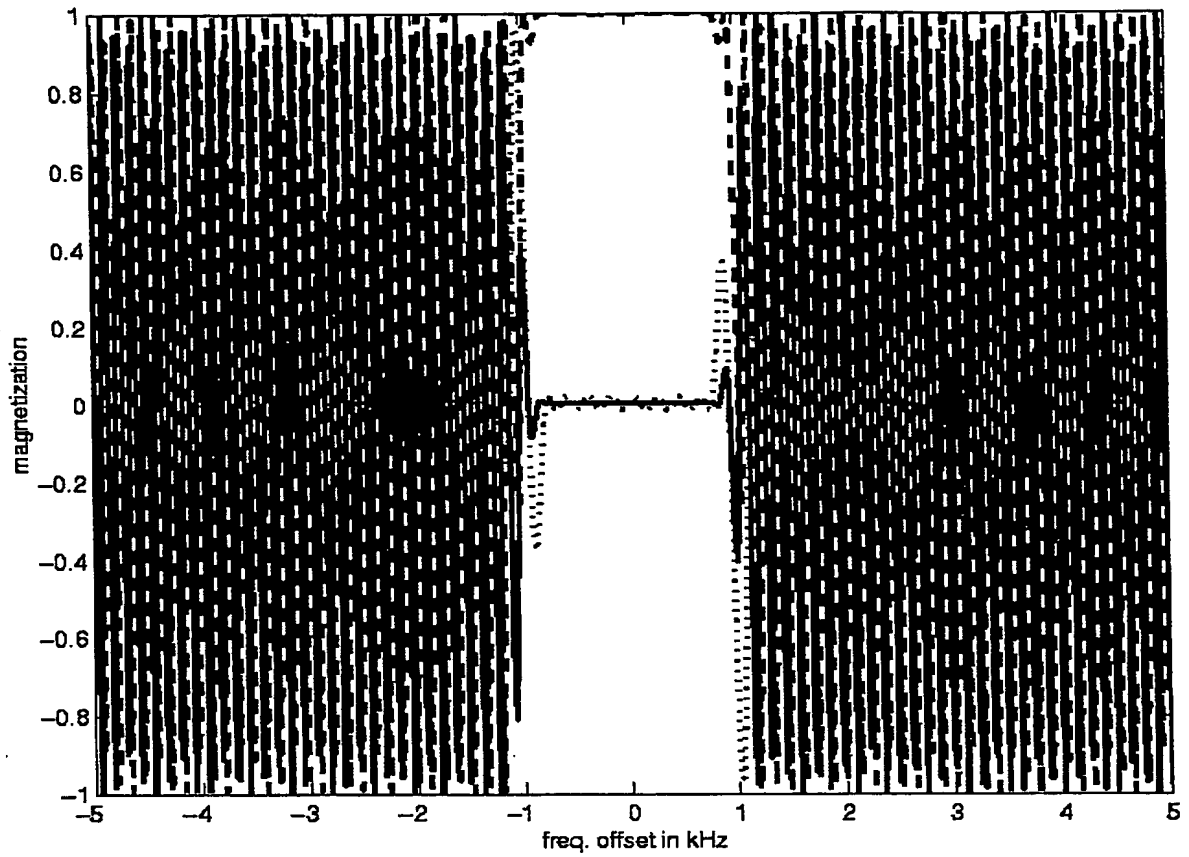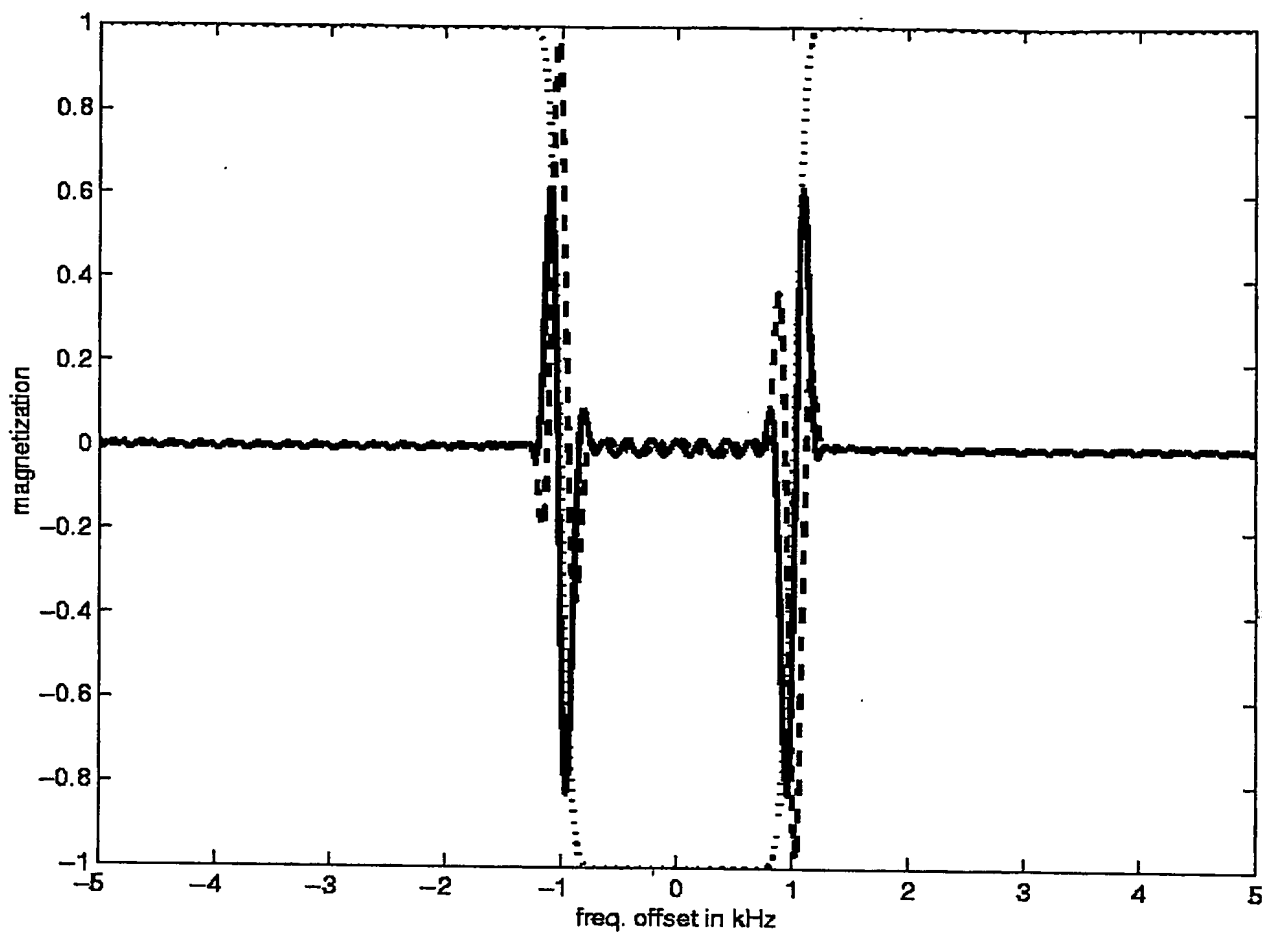FIGURE 5(a)

FIGURE 5(b)
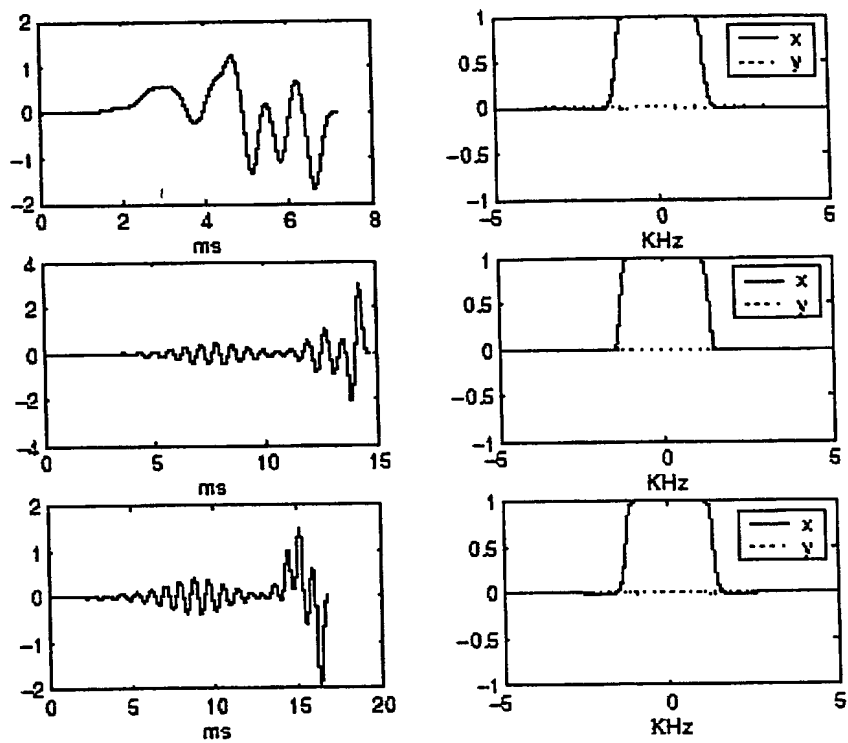
FIGURE 5(c)

FIGURE 5(d)

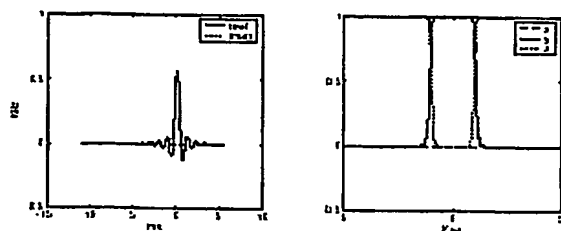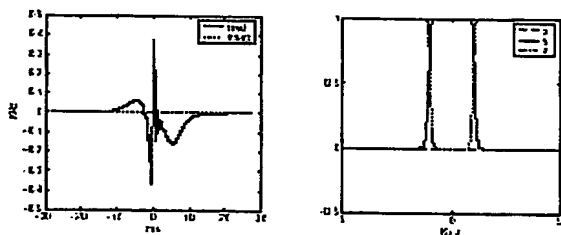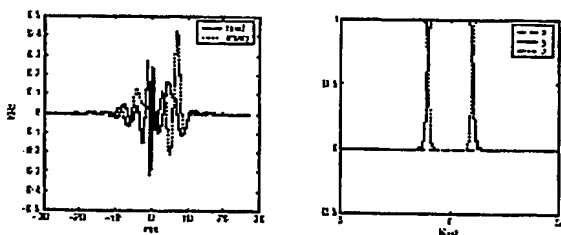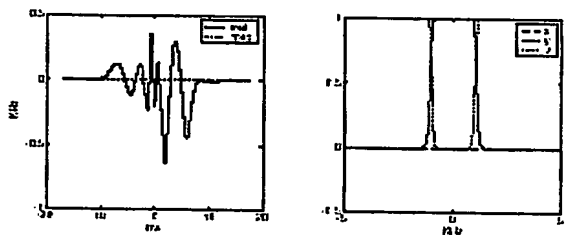FIGURE 6

(a) The minimum energy pulse with magnetization profile M.

(b) The pulse with magnetization profile M, and a bound state at $0.5i$ with norming constant 1.0.

(c) The pulse with magnetization profile M, and bound states at $0.5i + 1.4$, and $1.0i - 1.0$, with norming constants: 1, and -10.

(d) The pulse with magnetization profile M, and bound states and $i - 1.1$, and $i + 1$, and norming constants 1.2, and 1.
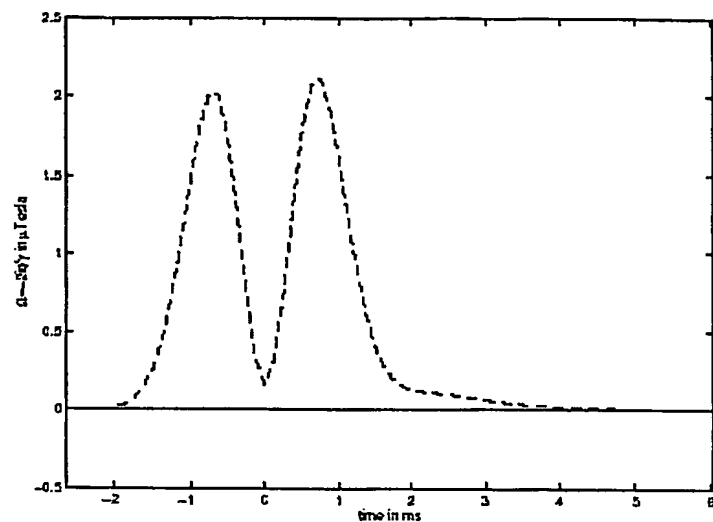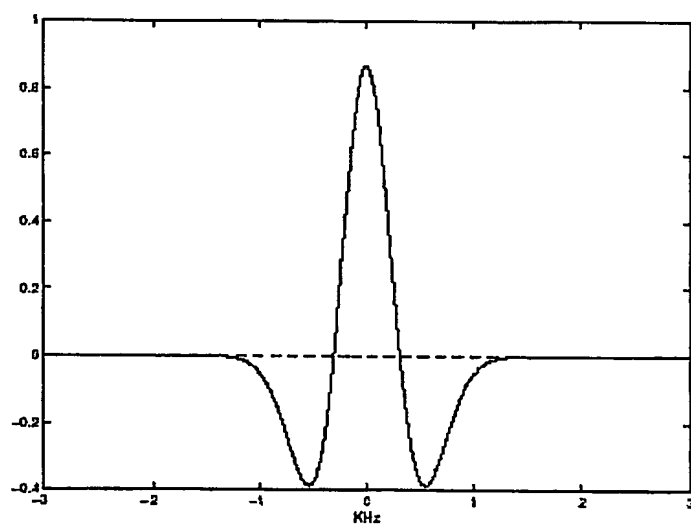
FIGURE 7

FIGURE 8 (a) Minimum energy pulse.

FIGURE 8(b) Transverse magnetization profile.